

IN THE HIGH COURT OF JUDICATURE AT BOMBAY,
GOA BENCH, AT PANAJI

PIL WRIT PETITION NO. 13 OF 2020

The Goa Foundation

)... Petitioner

v/s

Mapusa Municipal Council & Ors

)... Respondents

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IN THE HIGH COURT OF BOMBAY AT GOA

AT PANAJI GOA

PIL WRIT PETITION NO. _____ OF 2019

SYNOPSIS AND CHRONOLOGY OF DATES AND EVENTS

This Petition is filed in public interest for appropriate directions to the Mapusa Municipal Council (Resp No.1), PWD (Resp No. 2) and other respondents to ensure construction of footpaths along all the main roads of Mapusa town, especially the road between the Mapusa Bus Stand and the Mapusa Altinho Circle (clock tower).

The roads of Mapusa are extremely busy with both vehicular traffic as well as pedestrian traffic. However, provisions for the safe and comfortable commute for the pedestrians do not exist. The lack of footpaths has created very dangerous situations for pedestrians at some places wherein people are constrained to walk against oncoming traffic.

The petitioner submits that it is high time the planning and public works authorities start making efforts to ensure that the roads of Mapusa town are more pedestrian friendly.

The petitioner also seeks directions to the North Goa Planning and Development Authority to specify provisions for pedestrians in the Development Plans for Mapusa town. These reliefs are sought under the fundamental rights of petitioners guaranteed to citizens under Article 21 of the Constitution of India. Hence this PIL,

LIST OF DATES AND EVENTS

Sr. No	Date	Particulars of events or documents if any	Annexure and Page
1.	28.12.2018	TCP Department directs the NGPDA to revise the Mapusa ODP	Ann 9 Pg. 39
2.	30.08.2019	Petitioner writes letters to the MMC asking for construction of footpaths in accordance with regulations.	Ann 4 Pgs. 31-32
3.	03.01.2020	The MMC conducts a site inspection along with the director of the petitioner organisation regarding construction of footpaths in Mapusa.	
4.	February 2020	This PILWP is filed as no action is taken by the authorities.	

POINT TO BE HEARD

The authorities are required under law to provide for footpaths along the road and to be make adequate provisions for persons with disabilities.

ACTS/RULES TO BE REFERRED

The Constitution of India, 1950

The Goa Municipalities Act, 1968

Persons with Disabilities Act, 1995

Goa, Daman and Diu Town and Country Planning Act, 1974

Goa Land Development and Building Construction Regulations, 2010

Urban and Regional Development Plans Formulation and Implementation (URDPFI) guidelines, 2014

AUTHORITIES TO BE CITED

Judgment of the Hon'ble Bombay High Court in *High Court of Judicature at Bombay in its own motion vs. State of Maharashtra and Ors.* [PIL No. 71 of 2013]

Judgment of the Hon'ble Supreme Court in *Sudhir Madan vs MCD* [(2009) 17 SCC 332],

Judgment of the Hon'ble Madhya Pradesh High Court in *Madhya Pradesh State Road Transport Corp vs Kanti Devi and Ors.* [1 1986 ACC 7]

Judgment of the Hon'ble Delhi High Court in *Outdoors Communication v. PWD and Municipal Corporation of Delhi* 2007 [2 CTLJ 179 Del]

Date: 21.02.2020

Place: Panaji, Goa

Advocate for Petitioners

**IN THE HIGH COURT OF BOMBAY AT GOA
AT PANAJI GOA**

PIL WRIT PETITION NO. _____ OF 2020

IN THE MATTER OF ARTICLE 14, 21,
39, 226 AND 227 OF THE
CONSTITUTION OF INDIA AND RULE
4(E) OF THE BOMBAY HC PIL RULES;

AND

IN THE MATTER OF THE GOA LAND
DEVELOPMENT AND BUILDING
CONSTRUCTION REGULATIONS, 2010;
OUTLINE DEVELOPMENT PLANS AND
THE GOA MUNICIPALITIES ACT, 1968;

AND

IN THE MATTER OF MANDATORY
PROVISION OF FOOTPATHS ON MAIN
ROADS IN MAPUSA TOWN, AND
OTHER PEDESTRIAN FRIENDLY
MEASURES.

The Goa Foundation
through its Secretary, Dr. Claude Alvares,
Having Regd. Office at
Room No 7, Above Mapusa Clinic,
Mapusa, Goa 403 507
Email id: goafoundation@gmail.com

.....Petitioner

V/s

1. Mapusa Municipal Council,
Through its Chief Officer,
Mapusa, Goa 403507

2. Public Works Department
Through its Chief Engineer,
Mapusa, Goa 403507
3. Electricity Department of Goa
Through the Executive Engineer,
3rd Floor, Vidyut Bhavan,
Division VI, Ansabhat,
Mapusa, Bardez- Goa 403507
4. North Goa Planning and Development Authority,
Through its Member Secretary,
Mala, Panaji, Goa. 403001
5. State of Goa,
Through its Chief Secretary,
Having office at Secretariat,
Porvorim, Goa. 403521

....Respondents

6. **THE DIRECTORATE
OF AGRICULTURE, GOA,**
thr. the Director of Agriculture,
Krishi Bhavan, Tonca, Caranzalem, Goa – 403001.
7. **THE COMUNIDADE OF MAPUSA,**
thr. its Attorney,
Near St. Jerome's Church,
Mapusa, Bardez, Goa – 403507.

*Amendment carried
out as per order
dt. 06/06/2023
06/06/23*

THIS HUMBLE PETITION OF THE PETITIONER
MOST RESPECTFULLY SHOWS

Particulars of the Cause against which PIL is filed

1. This Petition is filed in public interest for appropriate directions to the Mapusa Municipal Council (Resp No.1), PWD (Resp No. 2) and other respondents to ensure construction of footpaths along all the main roads of Mapusa town, especially the road between the Mapusa Bus Stand and the Mapusa Altinho Circle (clock-tower) - **Stretch A.**
2. The petitioner states that the said roads experience heavy traffic of all kinds. Buses, trucks, transport vehicles, cars, taxis, two wheelers, cyclists and pedestrians regularly use this road for their daily commute.

However, the authorities, in dereliction of their duties, have only catered to those with motorized forms of transport, thus neglecting cyclists and pedestrians. No provisions are made for the easy movement of those with disabilities.

3. Across the developed world and even in several Indian cities like Chennai, Bangalore and Delhi, the Municipal Bodies are working towards closing down segments of roads for cars, and making available more space for Non-Motorised Transportation like pedestrian walks, and exclusive cycle tracks. The Corporation of Chennai has even formulated a policy for Non-Motorised Transportation and has taken significant steps to facilitate pedestrians in the city. The petitioner submits that it is high time the planning and public works authorities start making efforts to ensure that the roads of Mapusa town are more pedestrian friendly. These reliefs are sought under the fundamental rights of petitioners guaranteed to citizens under Article 21 of the Constitution of India. Hence this PIL.

Particulars of the Petitioners

4. Petitioner is an environment NGO based in Goa who has approached both, this Hon'ble Court and the Hon'ble Supreme Court, time and again over the past three decades, in public interest, for enforcement of the provisions of environment, wildlife, forest, coastal regulation, land use, pollution control, mining laws and sustainable town planning. All its members are citizens of India. The average annual income of the Petitioner organization is around Rs.9 lakhs. The Petitioner states that there is no civil, criminal or revenue litigation

involving the Petitioner organization which has or could have a legal nexus with the issue involved in this PIL. Documents relating to the Petitioner are herein marked and annexed to the petition as **Annexure 1 colly**. Undertaking that the petitioner will disclose the source of information leading to the filing of the PIL is herein marked and annexed at **Annexure 2**.

Particulars of the Respondents

5. Resp No. 1 is the Mapusa Municipal Council which is the local body responsible for sanctioning works related to roads in Mapusa town. Resp No. 2 is the Public Works Department which is responsible for carrying out road related works. Resp No. 3 is the Electricity Department of Goa which has erected electrical poles along the Mapusa main road between the Clock-tower and the Bus Stand, which violate the setback rules for public roads and are in fact located in the area designated for footpaths. Hence, the Electricity Department is made a party to this petition.

6. Resp No. 4 is the North Goa Planning and Development Authority which is responsible for preparing the Mapusa Outline Development Plan (ODP) and the Comprehensive Development Plan (CDP). Resp No. 5 is the respondent state.

Declaration of the Petitioner

7. The Petitioner states that this petition is filed by way of public interest and the petitioner does not have any personal interest in the matter except in so far as looking after their own safety may be seen as a private interest as well. The PIL is filed in the interests of pedestrians

who find their daily commute a struggle due to the absence of footpaths and other pedestrian friendly measures including easements for people with disabilities. Reliefs claimed are in public interest, in so far as they relate to public rights guaranteed under Articles 14, 21 and 39 of the Constitution and under the Goa Land Development and Building Construction Regulations, 2010, ODP and local authority regulations.

8. The Petitioner states that the entire litigation costs and other charges are being borne by the petitioner, as the petitioner is zealous about safeguarding the rights of pedestrians to the use of roadways in the state.

9. Petitioner states that adequate research has been conducted in the matter raised through the petition and all relevant material has been annexed to the petition. More may be added, if necessary, at later stage.

10. The Petitioner states that to the best of its knowledge and research the issues raised in the petition was not dealt with or decided and that a similar or identical petition was not filed earlier by the petitioner on the same matter either in this Hon'ble Court or in the Supreme Court of India. This Hon'ble court has jurisdiction to hear and dispose this matter.

11. The Petitioner has understood that in the course of hearing of this petition, the Court may require any security to be furnished towards costs or any other charges and the petitioner shall comply with such charges.

Facts constituting the cause

12. The petitioner states that Mapusa is a busy market town with high flowing traffic, both vehicular and pedestrian. The pedestrians include people of all ages. There are also numerous schools abutting the roads of this town. When these schools disgorge their students, these children have no means of crossing the mindless traffic. There are no speed limits or traffic signals. It is seen that the current condition of the roads make it extremely difficult for pedestrians to commute. For the sake of convenience, this petition will focus on the following stretches of roads in Mapusa town separately.

- a. Duler Ground Road between Clock-Tower (Altinho) and Mapusa Bus Stand (Stretch A)
- b. District Hospital Road between Clock-Tower and the District Hospital (Stretch B)
- c. Duler Ground Road between Clock-Tower and Duler Stadium (Stretch C)
- d. Duler-Marna-Siolim Road between Clock-Tower and St. Xavier's College (Stretch D)
- e. Anjuna-Mapusa Road through Khorlim (Stretch E)

Stretch A - ~~Duler~~ Ground Road between Clock-Tower and Bus-Stand

13. This is the busiest road in Mapusa which is on a steep slope connecting the Clock-Tower and the Mapusa Bus-Stand. The current average width of this road is approximately **10-12 meters**. Literally hundreds of people of Mapusa town walk up and down this slope for various purposes. School children and older persons find it precarious

to walk along the road or to cross the road. There are no pedestrian crossings anywhere. Worse, since there are no demarcated footpaths, pedestrians have to struggle with speeding and dense traffic. Photographs (with location and time) showing the current condition of this road and the difficulties faced by the pedestrian are enclosed herewith as **Annexure 3.**

14. As can be seen in the pictures, the current condition of the road makes walking on it a highly stressful task. Petitioner submits that construction of dedicated footpaths along both sides of this road is absolutely essential to ensure safe commute for the people of Mapusa. This task should be given priority and completed as soon as possible.

15. On 30.08.2019, the petitioner wrote to the Chief Officer of the MMC expressing concern over the current condition of the roads and requested that the MMC considers constructing an exclusive pedestrian pathway along the road before it becomes even more difficult in the future. Copy of this letter is enclosed herewith as **Annexure 4.** Thereafter, one dilapidated building has collapsed onto the road. Fortunately, as it happened at night, no person was injured or killed.

16. Pursuant to the petitioner's letter dated 30.08.2019, the MMC invited the director of the petitioner organisation to assist the Municipal Engineer Gr.III for a site inspection regarding construction of footpaths on this road. The site inspection was carried out on 03.01.2020. During the inspection, it was seen that it is possible to construct a proper footpath on this road. However, steps are to be taken to remove certain obstructions.

17. It is seen that the Electricity Department (Resp No.3) has erected electrical poles along this road in a very careless manner. As can be seen in the picture in Pg 30 of Annexure 3, the poles are placed in a very haphazard manner obstructing significant space on the road which ought to be occupied by footpaths. These poles pose a problem for construction of the footpaths along the road. Therefore, it is necessary that the alignment of these poles be shifted to accommodate facilities for the pedestrians.

18. It is also seen that a particular old structure (Restaurant 'Manjunath') occupies significant road space causing pedestrians to essentially walk against oncoming traffic. This structure can be seen in the picture in pg 30 of Annexure 3. During the site inspection, it was seen that this problem can be addressed by making adjustments to the entrance of this building.

19. As mentioned in the letter dated 30.08.2019, the petitioner states that, if necessary, it is willing to assist the authorities in formulating a plan for providing pedestrian facilities in Mapusa, in public interest.

Stretch B - District Hospital Road between Clock-Tower and the District Hospital

20. This is another very important road in Mapusa that leads to the District Hospital. The Mapusa court complex is also situated on this road and it is seen that no provisions for pedestrian commute is made. The initial stretch of this road from the clock tower is approximately 10-12 mts wide but after the Civil Court Complex, the width of the

road reduces to 5-7mts. Pictures showing the current condition of the road are enclosed herewith as **Annexure 5.**

21. Petitioner submits that, in order to ensure safe and easy commute for the people walking on this road, it is essential to construct footpaths and necessary pedestrian facilities.

Stretch C - Duler Ground Road between Clock-Tower and Duler Stadium

22. This road is on a slope that connects the Duler residential area to the Clock tower. The approximate current width of this road is 5-8mts. The Mapusa Municipal Council Building at the head of this road and it is seen that although there is sufficient space in front of the MMC building to construct provisions for pedestrians, nothing other than a bus-stop is provided. It is important to note that large crowds of people congregate in front of the MMC building during peak hours to board their busses. Due to the lack of adequate pedestrian facilities, the situation in this area is quite chaotic. Pictures showing the current condition of the road are enclosed herewith as **Annexure 6.**

23. The petitioner submits that it is essential to create a pedestrian footpath network on this road to connect the Duler residential area to the clock-tower.

Stretch D - Duler-Marna-Siolim Road - Between Clock-Tower and St.Xavier's College

24. Petitioner states that this is the only road in the area with properly constructed footpaths in certain segments. However, this footpath only starts from the wider part of the road (i.e.,) the govt. civil

supplies godown (opposite the Mosque) to St. Xavier's College. However, the busier stretch of this road that connects the clock-tower to the Mosque does not have a footpath. Approximate width of the busier stretch of this road is 5-8mts. Pictures showing the current condition of the road are enclosed herewith as Annexure 7.

25. The petitioner appreciates this work of the MMC and submits that steps ought to be taken to ensure that the segment between the clock-tower and the govt. godown is also connected with a footpath. The objective should be to have a well-connected network of footpaths which will allow pedestrians to access all parts of the area by foot, without hassle. Segments of footpaths which come to an abrupt end should be avoided.

Stretch E – Khorlim Road

26. This is another very busy road of Mapusa which goes through the Khorlim residential area. Segments of footpaths are seen on this road near the Mapusa Police station. However, the busiest parts of this road are seen to be quite narrow and have absolutely no provision for pedestrians although several people walk along this road at all times of the day. Pictures showing the current condition of the road are enclosed herewith as Annexure 8.

27. Construction of a dedicated footpath and necessary steps to control the flow of traffic on this road are absolutely essential to ensure safe commute for the pedestrians in this area. Since this is a residential area, the frequent pedestrians include school-children, and senior citizens.

Requirement of Footpaths as per Town Planning Laws

28. As per Section 31 of the Goa Town and Country Planning Act, 1974, the North Goa Planning and Development Authority (Resp No. 4) was required to prepare a 'Comprehensive Development Plan' (CDP) for Mapusa within 3 years of its constitution. As per Section 32 of the act, the CDP should provide for a detailed road pattern, road improvements and other amenities/utilities. The petitioner submits that as per these provisions, the NGPDA is required to indicate mandatory provisions for footpaths for the roads of Mapusa.

29. The scheme of the Goa TCP Act indicates that the CDP would normally be prepared after an Outline Development Plan (ODP) is finalised as the CDP would be more detailed than the ODP. Section 30(2)(b) of the act which deals with contents of the ODP allows the ODP to include all or any of the matters that are required to be provided for in the CDP.

30. The petitioner states that presently, the NGPDA has recalled its ODP for Mapusa. Order of the TCP Department dated 28.12.2018 directs the NGPDA to take up the process of revising the Mapusa ODP afresh. This order is enclosed herewith as Annexure 9. The Mapusa ODP is currently in the process of being revised. It appears that the PDA is only concerned with the ODP and is seen constantly revising this to accommodate real estate demands, and for this reason, is not progressing to a CDP, a mandatory requirement under the Town and Country Planning Act, 1974.

31. Since the ODP for Mapusa itself is not finalised, prospects for finalisation of a CDP in the near future seem very bleak while there is an urgent need for footpaths on these roads. The situation of pedestrians is getting worse by the year as vehicular traffic increases. The petitioner therefore submits that the NGPDA ought to be directed to specify mandatory provisions for footpaths for the roads of Mapusa in the ODP that is being currently revised. The revised ODP ought not to be notified unless it provides for footpaths.

32. As per the planning framework mentioned in regulation 12.1 of the Goa Land Development and Building Construction Regulations, 2010, a minimum 2.50-meter width on either side of the road must be maintained for footpaths along with a 0.50-meter drain in the case of a 15-meter street. These regulations are applicable to the whole of the State of Goa. The Section reads:

"12.1 Regulations regarding roads:

(a) All road right of ways shall have the carriage widths and other widths specified in the following TABLE-X:

TABLE-X

<i>Right of way (road width) in meters</i>	<i>6</i>	<i>8</i>	<i>10</i>	<i>15</i>
<i>Carriage width in mts.</i>	<i>3.50</i>	<i>4.50</i>	<i>7.00</i>	<i>9.00</i>
<i>Shoulder/Footpath width in mts.</i>	<i>1.10 on each side</i>	<i>1.35 on each side</i>	<i>1.10 on each side</i>	<i>2.50 on each side</i>
<i>Width of road side drain in mts.</i>	<i>.30 on one side</i>	<i>.40 + .40</i>	<i>.40 + .40</i>	<i>.50 + .50"</i>

Grounds

33. The Petitioner is therefore approaching this Hon'ble Court in public interest on the following grounds, among others: -

- a. According to section 2(113) of the Goa Land Development and Building Construction Regulations, 2010, "*Road or Right of way (R/W), means the right of way of the road or street inclusive of the carriageway, shoulder, drain, footpaths, and shall be measured at right angles to the course of direction of such road or street. "In the Rules of the Road Regulations, 1989, it is said that "the pedestrians have the right of way at uncontrolled pedestrian crossings."*
- b. According to the 2008 study on traffic and transportation policies and strategies in urban areas in India carried out by the Union Ministry of Urban Development, the national average of percentage of people walking is 28%. In this situation, the needs of such a section of society cannot be ignored. Since time immemorial, the pedestrian has the first right of way on any given street. Article 21 includes the right to a safe and danger free environment. Despite this right, and the existence of mandatory regulations for the setting up of footpaths, no measures whatsoever have been taken by the panchayat and other authorities in this regard resulting in frequent accidents and an extremely unsafe environment for pedestrians.
- c. The Goa Municipalities Act, 1968 has provisions reading:

"168. Powers in respect of public streets.—

(1) It shall be lawful for a Council—

- (a) to lay out and make new public streets, including tunnels, bridges, sub-ways and other works subsidiary to public streets;
- (b) to widen, open, extend or otherwise improve any public street or any work subsidiary to a public street."

d. An important case in this regard is PIL No. 71 of 2013, the High Court on its own motion, *High Court of Judicature at Bombay vs. State of Maharashtra and others*. Though the judgement is based on the Mumbai Municipal Corporation Act, 1888, the provisions of the Act are *pari materia* with the provisions of Goa Municipalities Act, 1968 thus giving it a binding nature. The judgment dated 24th February and 12th April 2018 reads:

"13. The effect of the aforesaid provisions of the three municipal enactments will have to be considered. As stated earlier, the definition of "street" or "public street" in various municipal laws referred above is very wide which include footways or footpaths. The mandatory duty of the Municipal Corporations and the Municipal Councils is to construct, maintain and improve public streets, bridges, causeways, culverts etc. The mandatory duties also include the duty of taking measures for ensuring safe and orderly passage of vehicular and pedestrian traffic on streets. Another obligation is to maintain public streets clean and to provide adequate lights thereon. The third obligation is to remove obstructions, projections upon the streets. Thus, the streets should be constructed, maintained and improved

with the object of ensuring safe and orderly passage of vehicular and pedestrian traffic."

Referring to the judgement of the apex Court in *Sudhir Madan vs MCD* [(2009) 17 SCC 332], the Court held:

"18. The right to have roads in a reasonable condition is a part of fundamental right guaranteed under Article 21 of the Constitution of India. The basic object of constructing roads is to allow the passage of vehicles. The basic object of making footpaths/ footways which are a part of street is to allow the citizens to walk and travel from one place to another. If obstructions are created on the streets or footpaths in such a manner that it prevent the citizens from beneficially or reasonably enjoying their right of passage through the streets and footpaths, surely it will amount to infringement of the fundamental right under Article 21 of the Constitution of India to have streets in a reasonable condition. The fundamental right to have the streets in a reasonable condition will naturally encompass in it right to have the same free of any obstruction which prevents its beneficial or reasonable user. The Apex Court has expanded the scope of Article 21 of the Constitution of India. The Apex Court has held that the right to live dignified life is also a part of Article 21 of the Constitution of India. Right to live a meaningful life is also a part of Article 21 of Constitution of India.

45. We summarize our conclusions as under:

A] It is a right of the citizens which is a part of Article 21 of the Constitution of India to have streets and footways in a reasonable condition. The citizens have right to use public streets and footways without any obstruction;

B] The basic object of constructing the streets is to allow passage of vehicles. The basic object of making footways which are part of the streets is to allow the citizens to walk and travel from one place to another. If obstructions are created on the streets and footways in such a manner that the same prevent the citizens from beneficially or reasonably enjoying their right of passage through the streets and footways, surely it will amount to infringement of their fundamental rights under Article 21 of the Constitution of India to have streets in a reasonable condition. If poor or bad condition of the streets or footways prevents the citizens from reasonably enjoying their right of passage through the streets or footways, it will be a violation of the said fundamental right by the authorities which are under a legal obligation to maintain the streets and footways in a reasonable condition;

C] As this right vests in the citizens, there is a corresponding obligation of the concerned authorities to ensure that all possible steps are taken to see that the

citizens are not deprived of their right to use the streets and footways in effective manner. For that reason, it is the obligation of the said authorities to create appropriate Grievance Redress Mechanism so that the citizens can complain about the violation of their rights. It is the right of the citizens to ensure the municipal and other authorities promptly deal with the complaints by taking effective steps. They have a right to know about the steps taken for upholding and protecting their rights;

D] If there is an injury caused to a citizen due to poor condition of streets as a result of negligence on the part of the Municipal and other Authorities, he has a right to seek compensation from the State or local Authorities, as the case may be, which are responsible for maintaining streets. In case of loss of life on account of poor condition of streets due to negligence on the part of the Authorities, the legal representatives of the deceased can seek compensation from the concerned Authorities in accordance with law."

- e. The petitioner submits that since the pedestrians also pay taxes, they must have equal rights to the use of roadways and that the rules have to be implemented by the authorities equally for the benefit of all citizens. The current focus of the Panchayat/MMC/PWD solely on motorized traffic and an investment pattern in furtherance of such a focus is violative of the right to equality of the people under Article 14 of our constitution. It is the statutory duty of the local

authorities to ensure adequate provision for people walking on foot or using cycles.

f. The worst sufferers of this inequality are older persons, children, and persons with disabilities, whose needs are blatantly neglected by authorities. For instance, under the *Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995* the government must provide for

- i. Auditory traffic signals, engravings on the surface of zebra crossings and on the edges of railway platforms to assist visually impaired persons
- ii. Slopes in pavements for easy access of wheel-chair users
- iii. Appropriate symbols of disability
- iv. Warning signals at appropriate places

g. The above-mentioned legislations recognize the pedestrian and his interests in a very fragmented and disjointed manner. Moreover, most of these provisions, particularly for those with disabilities, are not implemented. This failure in implementation in turn makes the provisions ineffective and redundant.

h. The Urban and Regional Development Plans Formulation and Implementation (URDPFI) guidelines mandate that "*Footpath, NMT provisions and Right of Use (RoU) of the various infrastructure shall also be assigned in the RoW at the stage of finalization of road network and hierarchy.*" Relevant extract of the guidelines along with a table showing the required width of the

footpath corresponding to the number of people traversing the path is annexed at Annexure 10.

i. The Madhya Pradesh High Court in the case of *Madhya Pradesh State Road Transport Corp vs Kanti Devi and Ors.* (11986ACC7) observed that “All persons have right to walk on the road and are entitled to the exercise of reasonable care on the part of the person driving the vehicle. Therefore, it cannot be said that the persons who are using the road for walking etc., they use the road at their own risk.” Hence it is the duty of the state to ensure proper safety measures for pedestrians.

j. In the case of *Outdoors Communication v. PWD and Municipal Corporation of Delhi* 2007 [(2)CTLJ179(Del)] a contract had been granted to the Petitioner by the Municipal Corporation to display hoardings on the roadside. This contract was challenged in the Delhi High Court by the PWD as being against public policy. The Court in this case held the contract to be illegal on the ground that it was against public policy. While coming to this conclusion the court observed:

“The pavement by its very definition is meant for the use of pedestrians. The pedestrian is as much a user of the road or the circulation system of the city as a bus, a truck or a luxurious car.... Pedestrians include the healthy citizens and also the unhealthy. It includes physically handicapped people and may also include the visually impaired.”

k. According to a 2008 study by Wilbur Smith Associates on behalf of the Union ministry of Urban Development, the walkability of the

city of Panaji is a mere 0.32. This low figure is a cause for grave concern especially since other cities in India like Bangalore (0.63), Hyderabad (0.68), Mumbai (0.85), Delhi (0.87) and Chandigarh (0.91) have much higher scores in terms of walkability, given that even these do not compare to the average walkability in the United Kingdom which ranges from 1.5 to 1.7. The relevant part of the report is at **Annexure 11**. Petitioner submits that the condition of Mapusa town is far worse than that of Panaji.

1. The petitioner submits that, in light of inaction by the local authorities towards providing adequate facilities for Non-Motorised Transportation, it is constrained to approach this Hon'ble court seeking appropriate directions for these facilities to be provided by the respondents.

Source of Information

34. The Petitioner is relying on information obtained from the studies conducted and the reports released by the Ministry of Urban Development and from personal inspection of the sites by the petitioner.

Nature and extent of Injury caused / apprehended

35. It is submitted that if the road is widened without making provisions for footpaths/cycle paths, it would be very difficult to have them constructed in the future. This would result in a chaotic situation on the streets creating a perfect hotspot for all sorts of accidents.

Delay, if any, in filing the petition

36. There is no delay in filing this petition. The harm and discomfort to pedestrians using these roads minus a footpath is a daily occurrence. Petitioners are filing this petition after making adequate representations to the concerned authorities which followed no action.

Representations made

37. Petitioner has made a representation to the Mapusa Municipal Council. Some letters are annexed to this petition. Other may be submitted if and when required.

Documents relied upon

38. List of documents to be relied upon is provided in the index.

Prayers:

39. Petitioner is therefore praying for the following reliefs, in public interest:

- a) For an order directing the Respondents to execute a plan for erecting footpaths (including execution) for the 5 busy roads of Mapusa town (para 12 of the petition), which is also compliant with regulations for persons with disabilities notified for the state of Goa and to submit this plan to this Hon'ble Court.
- b) For costs of this petition;
- c) Any other reliefs this Hon'ble Court may be pleased to grant.

Interim reliefs:

- d) For an order directing the NGPDA to ensure that adequate facilities for pedestrians are provided for in the Mapusa ODP before it is finalised.
- e) For an order directing the Respondents to prepare a plan for erecting footpaths for the 5 busy roads of Mapusa town (para __ of the petition), which is also compliant with regulations for persons with disabilities notified for the state of Goa and to submit this plan to this Hon'ble Court.
- f) For an order directing the Electricity Department to submit a plan to shift electricity poles in the way of the public footpaths proposed.

Caveat

40. No notice has been received of lodging a caveat by the opposite parties.



Date: 21.02.2020

Place: Panaji, Goa

Petitioner

**IN THE HIGH COURT OF BOMBAY AT GOA
AT PANAJI GOA**

PIL WRIT PETITION NO. /2020

The Goa Foundation
V/s
Mapusa Municipal Council Ors

...Petitioners

...Respondents

AFFIDAVIT

I, Dr. Claude Alvares, Secretary, Goa Foundation, Petitioner herein, do hereby solemnly affirm and declare as under:-

1. I have today filed a writ petition in public interest for the reliefs sought therein.
2. I state that there is no personal gain, private motive or oblique reason in filing the PIL.
3. The petitioner is ready to pay costs as ordered by the Court, if it is ultimately held that the petition is frivolous or has been filed for extraneous considerations or that it lacks *bona fides*.
4. The petitioner shall disclose the source of its information, leading to the filing of the PIL, if and when called upon by the Court, to do so.
5. I solemnly declare and say that what has been stated in 1, 2(p), 3(p), 4-13, 14(p), 15-16, 17(p), 18-20, 22, 24, 26, 28(p), 29, 30(p), 31(p), 32(p), 34, 36-38 and 40 of the accompanying petition are in the nature of facts which are true to my own knowledge I believe the same to be true and the contents of paras 2(p), 3(p), 14(p), 17(p), 21, 23, 25, 27, 28(p), 30(p),

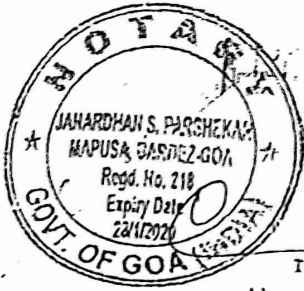
31(p), 32(p), 33, 35 and 39 are my submissions, made on legal advice which I believe to be true and correct. No part of it is false and nothing material has been concealed there from.

6. I say that the documents annexed are true copies of their originals.

Solemnly affirmed at Mapusa, Goa

this the 21st day of February 2020

Deponent



Certified to be true copy
of the original

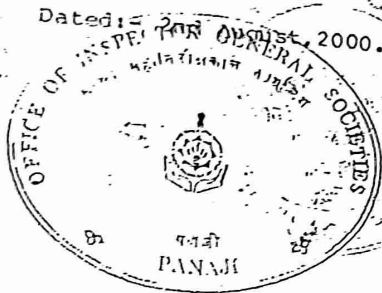
Annexure - 1 Colly

25

C E R T I F I C A T E

In view of the Affidavit filed by the Secretary of the Society 'THE GOA FOUNDATION' for the purpose of 3 (B) (4) of the Societies Registration (Goa Amendment) Act, 1998, it is hereby certified that the registration of the said Society, registered under the Societies Registration Act, 1860 under No.23/Goa/86 is hereby renewed for a further period of five years w.e.f. 11-6-2000.

Dated: 21st August, 2000.

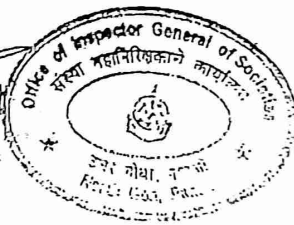


(P. V. S. Sardesai)
Inspector General
By -Order

Registration renewed till 11-06-2015

Dated 21/01/2011

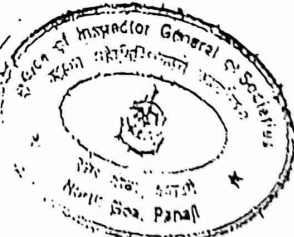
Inspector General of Societies/
District Registrar (North Goa)
By Order



Registration renewed till 11-06-2020

Signed 24/9/2015

Inspector General of Societies/
District Registrar (North Goa)
By Order



The Goa Foundation

G-8, St. Britto's Apartments,
Feira Alta, Mapusa 403507 Goa,
Phones: 2256479

www.goafoundation.org
email: goafoundation@gmail.com
12.1.2014

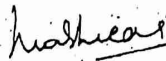
26

Truecopy

RESOLUTION OF THE GOA FOUNDATION

"It is hereby resolved that in supersession of earlier resolutions dated 30.9.2010 and 4.1.2013, all new PILs and in all matters connected therewith filed by the Goa Foundation would be signed either by Mr Mathias Vaz, President or Dr Claude Alvares, the Secretary of the Association. This resolution to apply to all matters filed henceforth in the High Court of Bombay, Panaji bench; National Green Tribunal (Pune/Delhi) and Supreme Court of India."

Certified copy:



(Mathias Vaz)
President

Annexure-2

27.

IN THE HIGH COURT OF BOMBAY AT GOA

PIL WRIT PETITION NO. OF 2020

The Goa Foundation

...Petitioners

V/s

Mapusa Municipal Council Ors

...Respondents

UNDERTAKING

I, Dr. Claude Alvares, Secretary of the Goa Foundation (Petitioner), undertake that I will disclose the source of information leading to the filing of the Public Interest Litigation if and when called upon by the Court to do so.

Panaji

Petitioner

Date:

Stretch A - Duler Ground Road - Between Clock-Tower and Bus-Stand

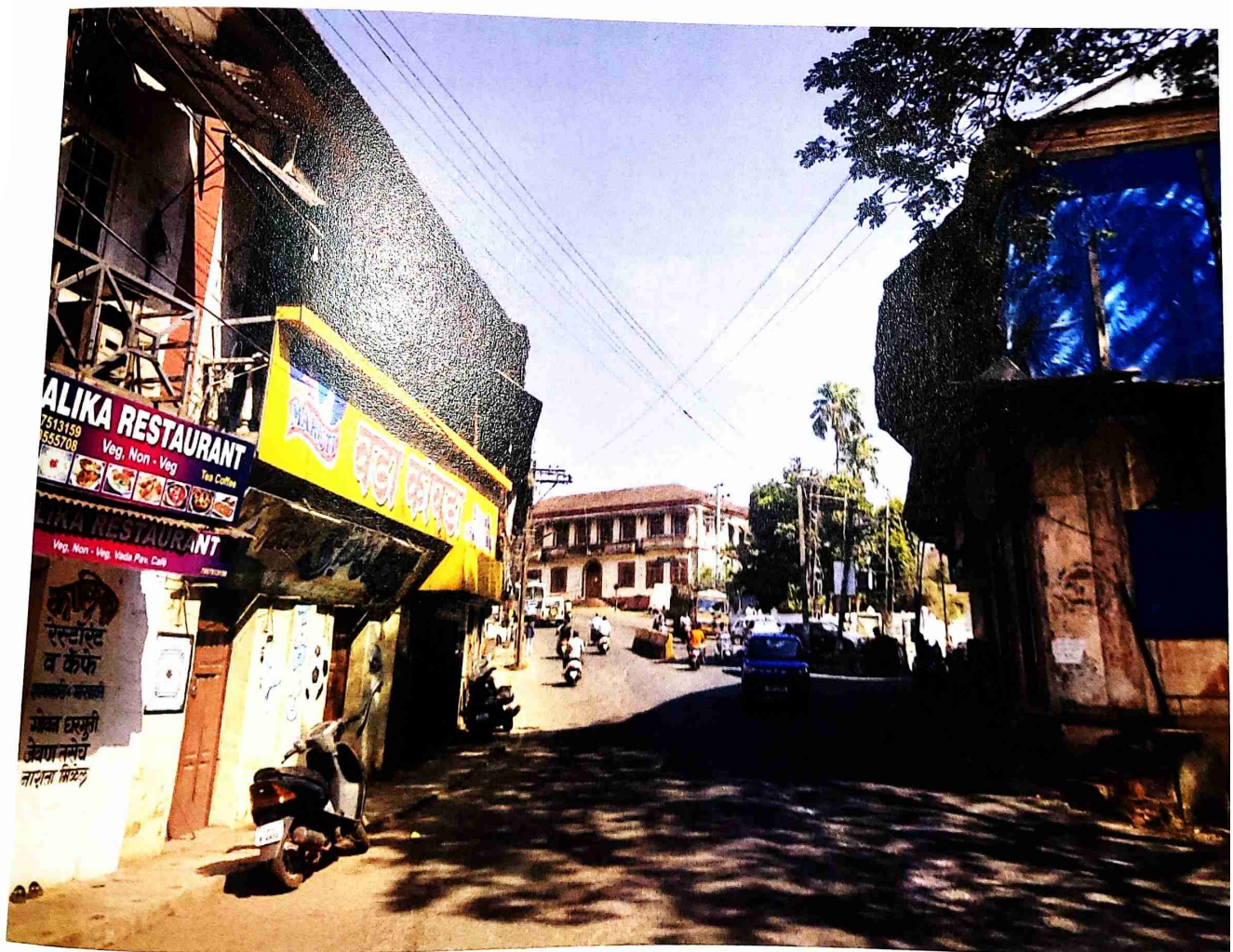
All photographs were taken on 31.01.2020



Stretch from Clock tower to the bus-stand



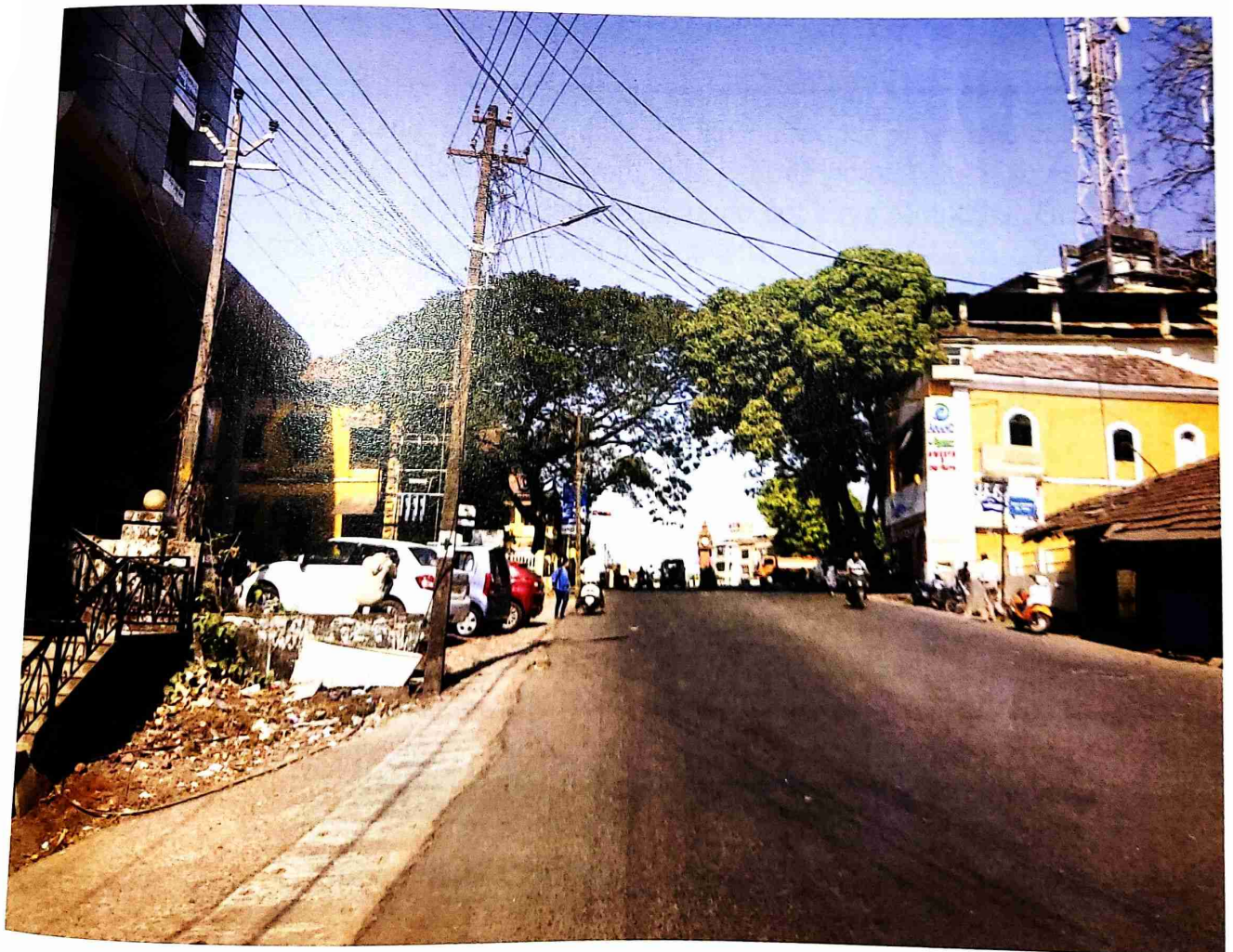
Stretch from Clock tower to the bus stand. Busy vehicular traffic.
Pedestrians have no space to walk



Stretch from the bus stand upwards towards the Clock-tower



Restaurant 'Manjunath' occupying significant road space



Electricity Poles along the road



G-8, St Britto's Apartments, Feira Alta, Mapusa 403507 Goa, INDIA
Tel: +91-(0)832-2256479; 2263305 (also fax)
E-mail: goafoundation@gmail.com Website: www.goafoundation.org

To:

30th August 2019

The Chief Officer,
MMC,
Altinho, Mapusa, Goa.

Subject: Pedestrian access on all public roads in Mapusa and related issues

Dear Sir,

I am writing to express concern that the main road from Mapusa Altinho circle (court) to the bus stand below still does not have a proper pedestrian pathway. In fact, all main roads leading off from this central point (clock tower) to St Xavier's College, Khorlim, District Hospital, do not have footpaths. The road to St Xavier's does have some footpaths in segments.

Literally hundreds of citizens of Mapusa town have to walk up and down this slope for various purposes. School children and older persons find it precarious to both walk along the road or to cross the road. There are no pedestrian crossings anywhere. Worse, since the pedestrian path up and down is not demarcated as a proper footpath, pedestrians have to struggle with speeding and dense traffic. There is now a building that will collapse any minute on pedestrians opposite the office of Dayanand Narvekar. If it collapses and kills anyone, the MMC will be squarely held responsible.

The MMC should consider the request of the Goa Foundation to move expeditiously to create an exclusive pedestrian pathway or footpath from Altinho to the lowest point of the road at the taxi stand, before it becomes even more difficult to implement in future. We are willing to assist the Council in this matter, if so desired and to submit a plan which the MMC can adopt and

implement. I am sure that CSR funding would be available for a project of this kind that will benefit the public in an enormous way.

Likewise, several footpaths of Mapusa town (where these are available) are encroached. It is about time this is re-examined by the MMC and these encroachments removed.

The new market fish/meat building is so filthy that it is difficult to negotiate the stairs and the smell. It has probably not been washed even once since it was commissioned. It is probably the dirtiest and grimeiest market in the entire state of Goa, something which the MMC should be ashamed about. This has been a season of excess rainfall, so the Council should not raise the objection now that there is no water for the cleanup. At least ensure it is cleaned up before October 2, 2019.

We are willing to assist in the cleaning if called upon to do so. If required, we can get other volunteers as well.

The MMC does need to have a small committee of committed individuals who are looking into the welfare needs of this market town: footpaths, waste bins, urinals, bus stand, parking, etc. As of now, all these issues appear to be tackled on an ad-hoc basis only when there is a problem or a court order, and the councilors appear to be busy mostly with their own personal matters.

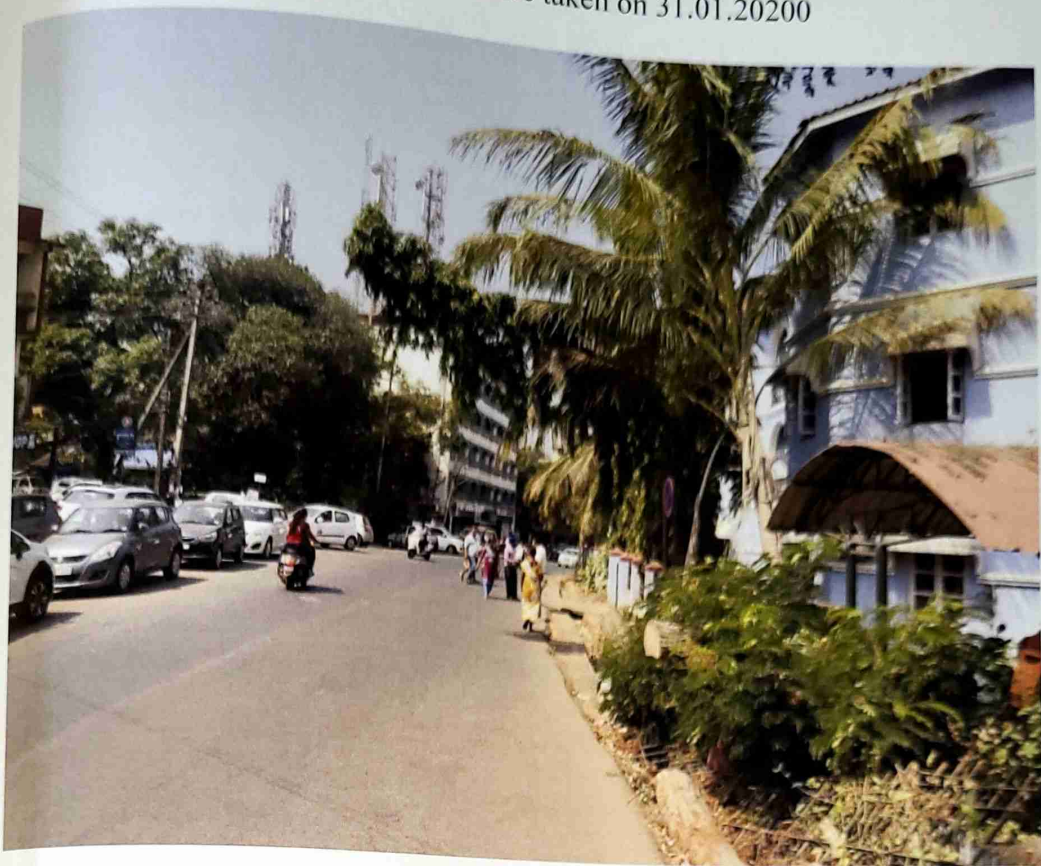
I do look forward to a response from you to this letter which is written entirely in public interest.

(Dr Claude Alvares)
Director

Copy to local MLA, Jason D'Souza.

Stretch B - District Hospital Road – From Clock-Tower to Hospital

All photographs were taken on 31.01.20200



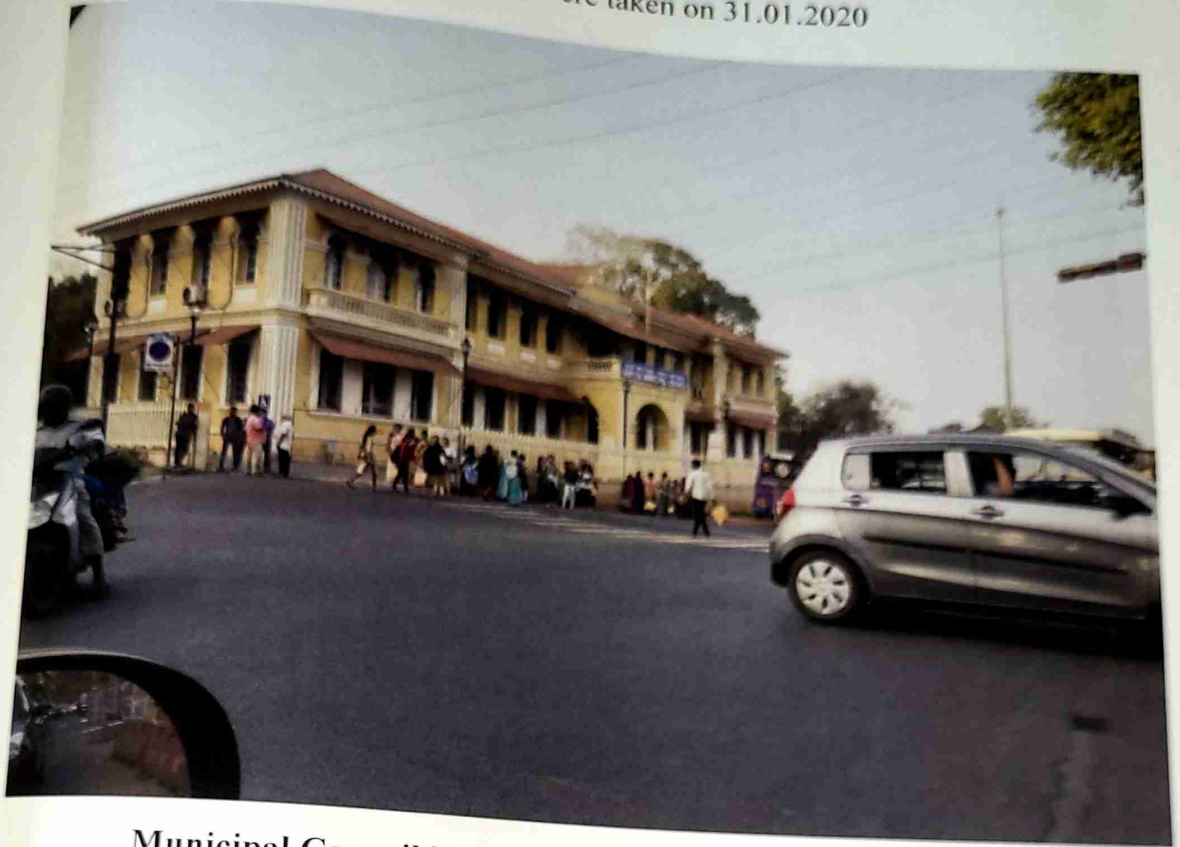
**Pedestrians walk on the road due to lack of pavement
(Mapusa Court Complex on right)**



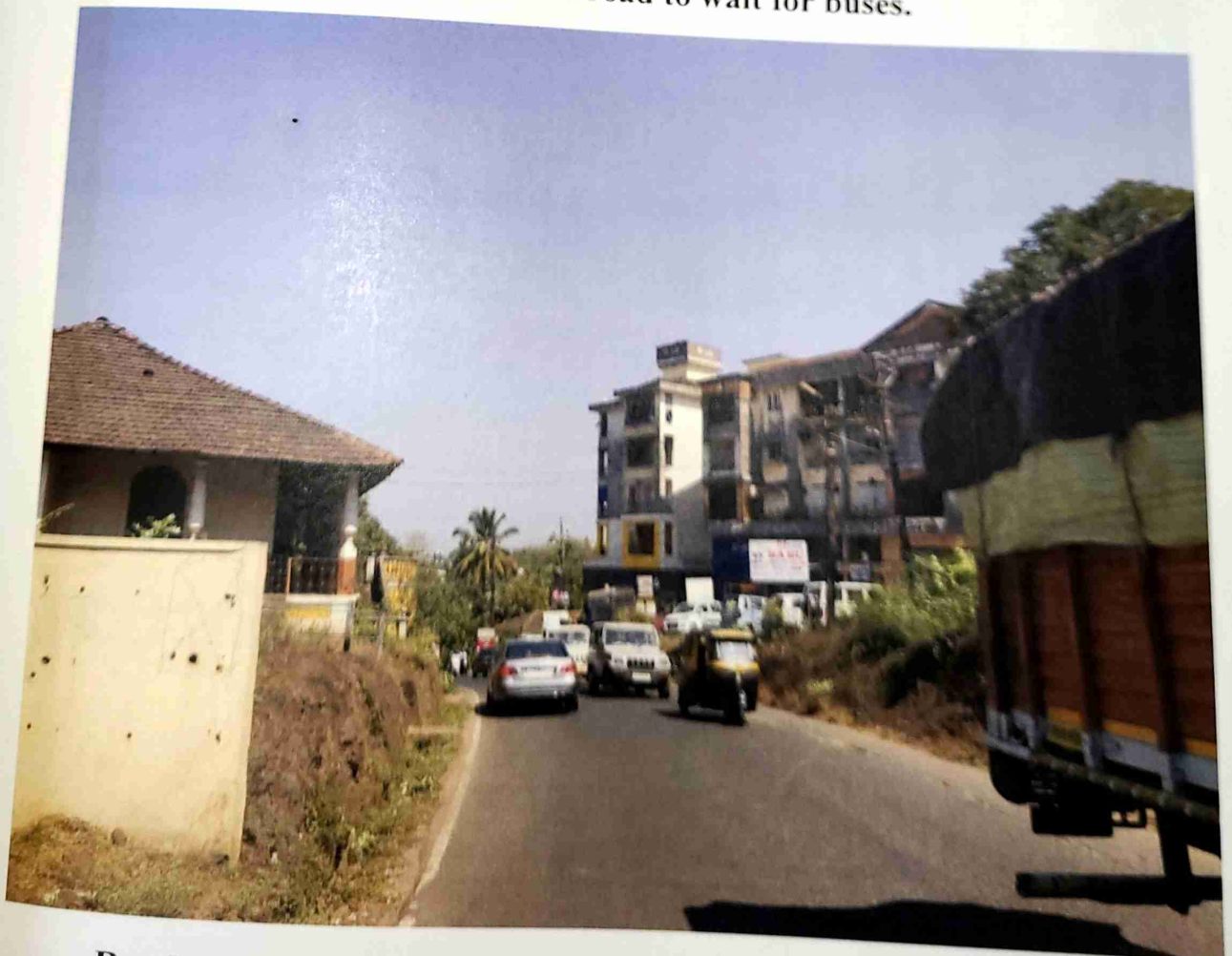
**Footpath outside the District Hospital premises – The footpath stops
where the hospital compound ends**

Stretch C - Duler Ground Road - Between Clock-Tower and Duler Stadium

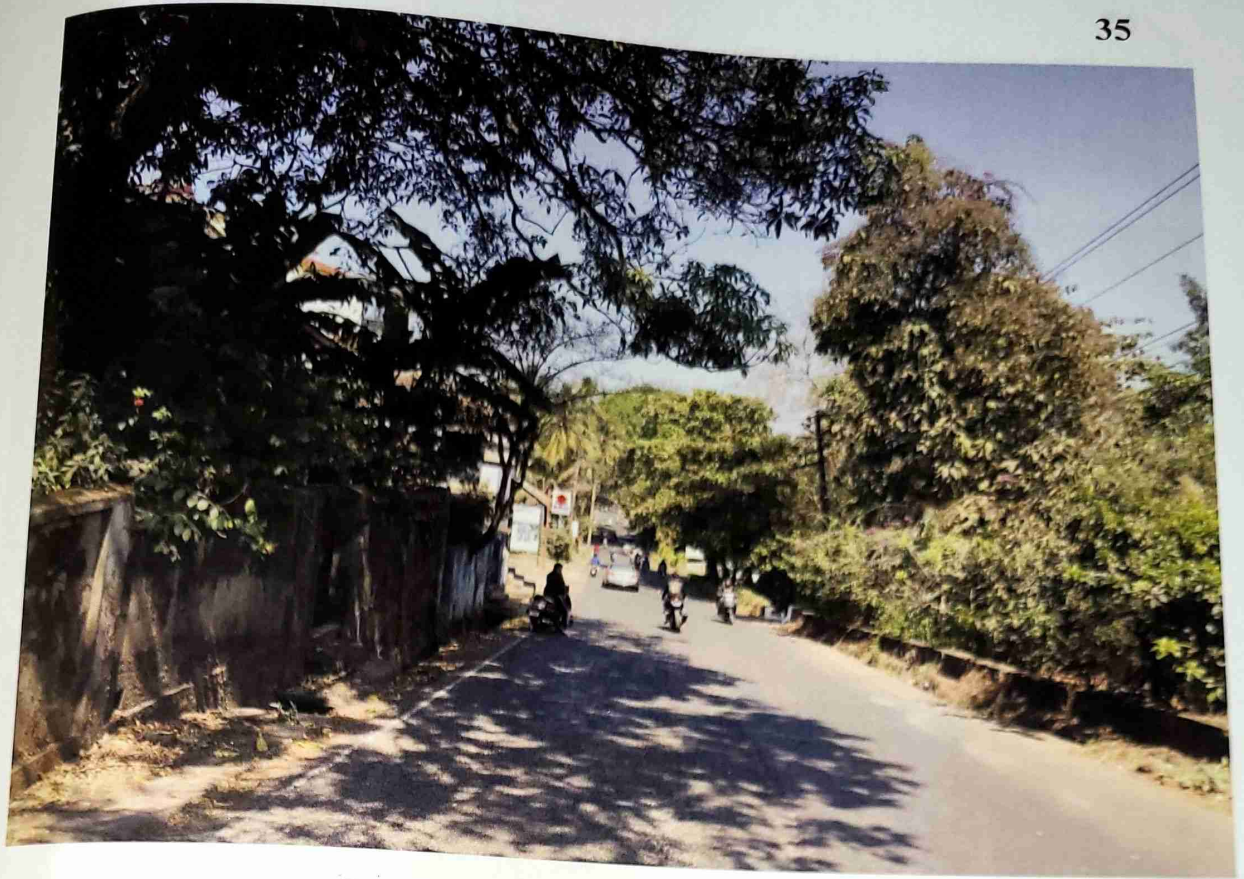
All photographs were taken on 31.01.2020



Municipal Council building is next to the clock tower.
People stand on the road to wait for buses.



Road narrows down considerably leaving no space to walk.

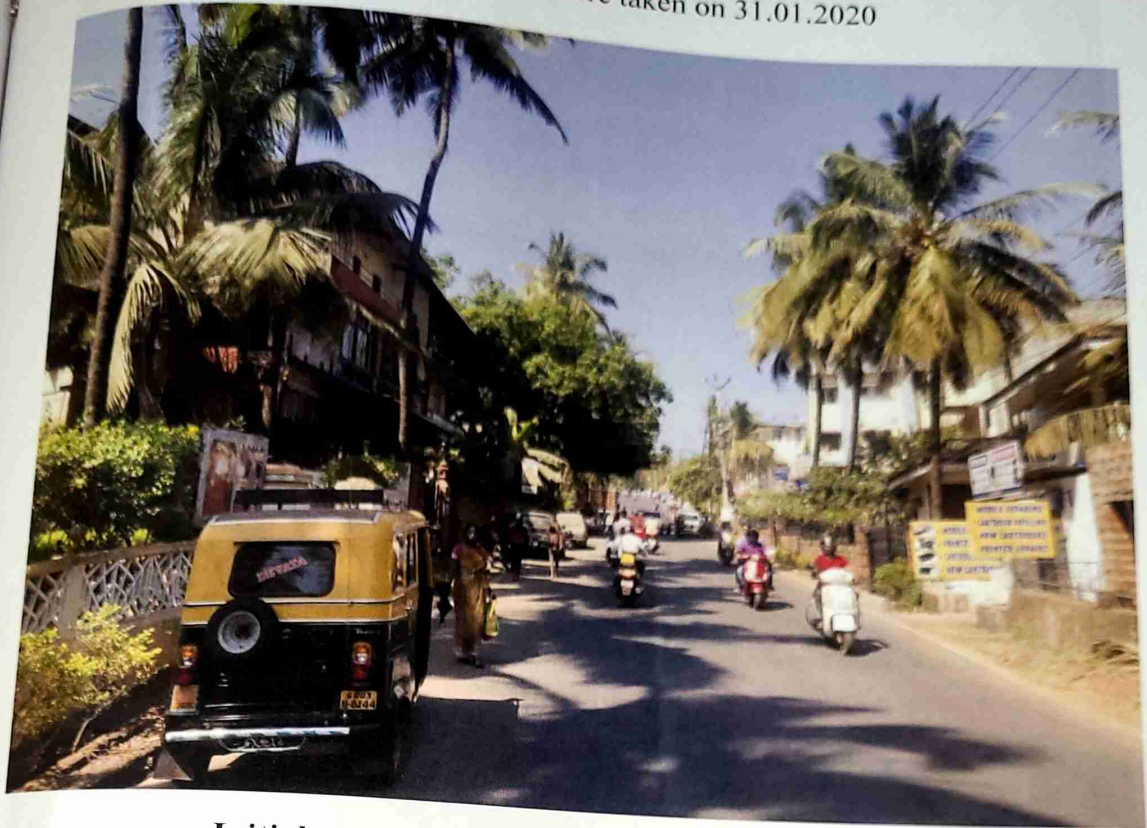


Road towards Duler Stadium



Road outside Duler Stadium (Stadium on right)

All photographs were taken on 31.01.2020

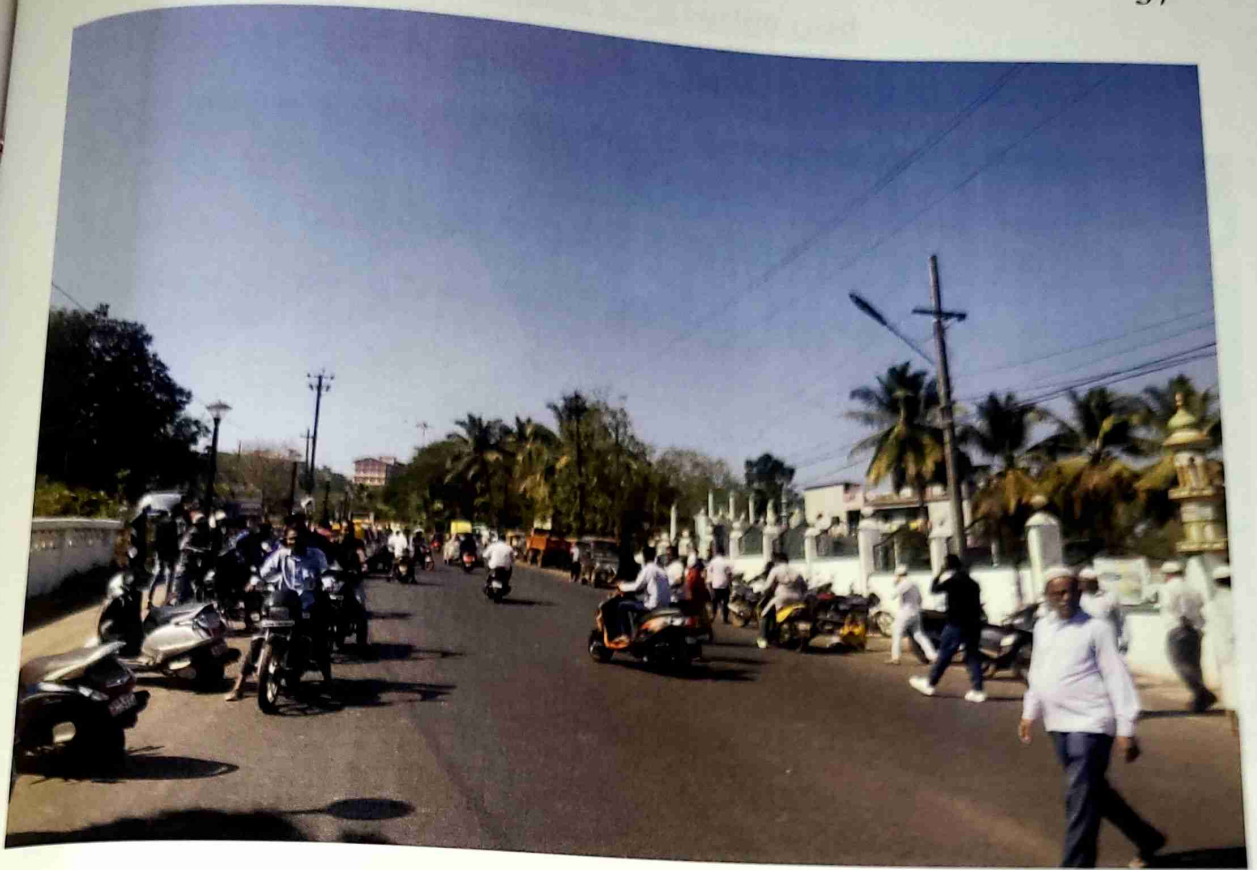


Initial section of the road is without footpath

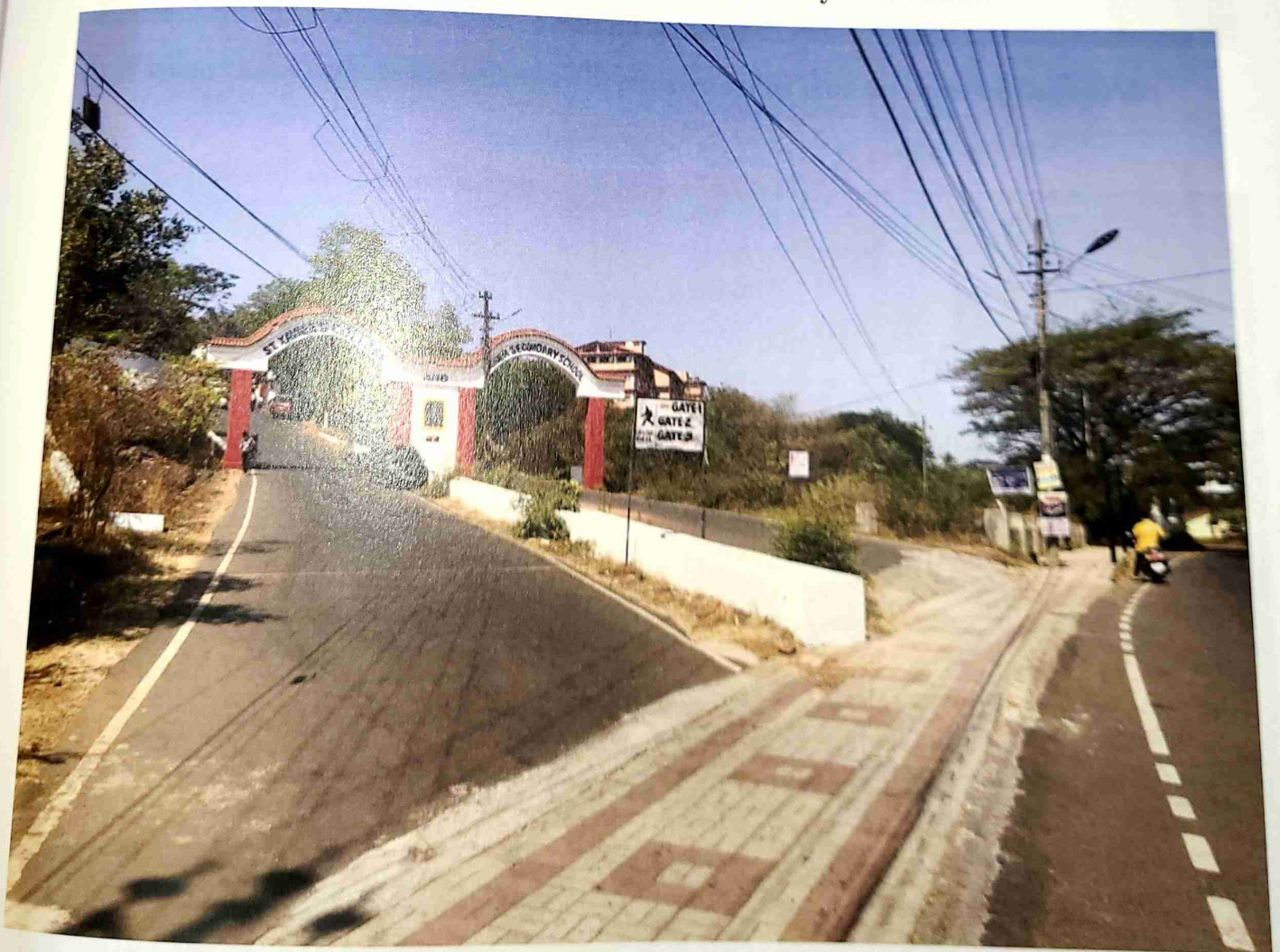
Clock tower is behind (not in picture)



Footpath starts from the Govt godown (bldg. on the right)



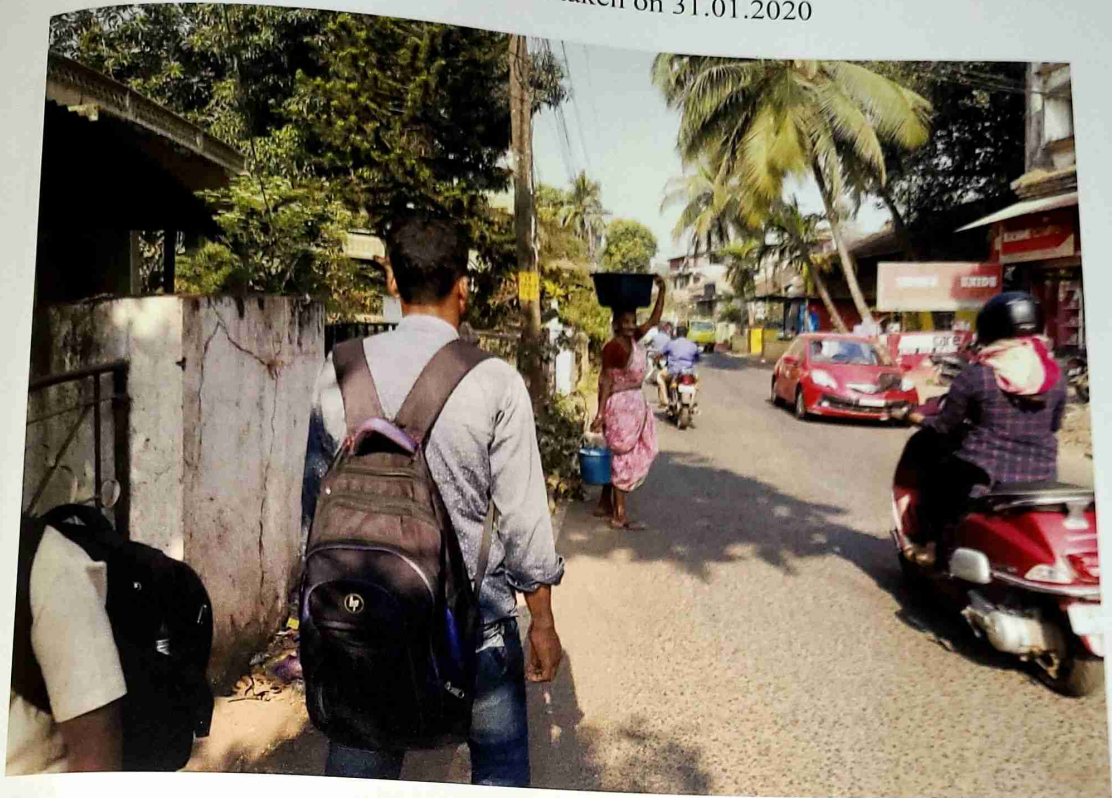
Road outside the Mosque on a Friday afternoon



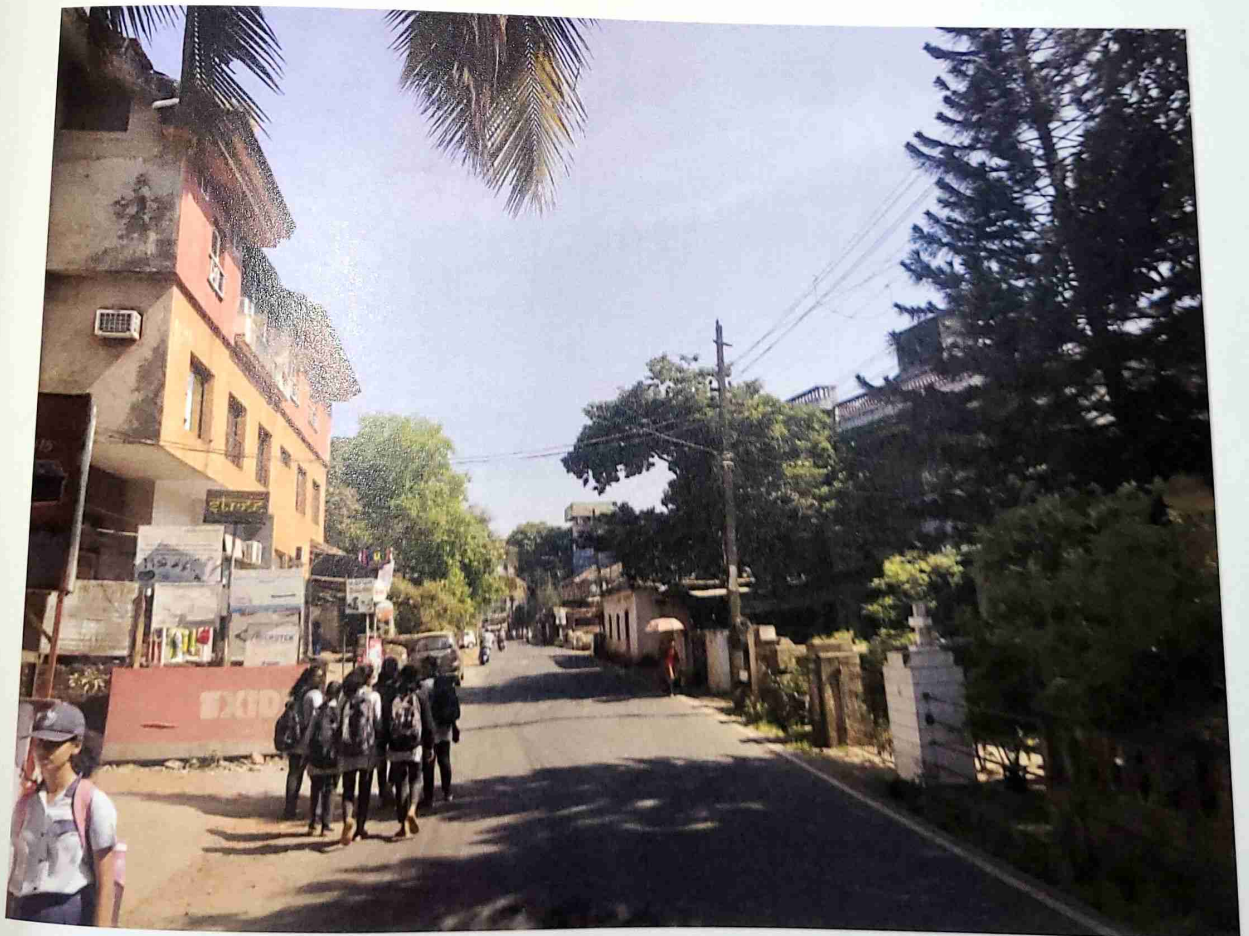
Footpath outside St.Xavier's college

Stretch E – Khorlim road

All photographs were taken on 31.01.2020



Pedestrians constrained to walk on the road due to lack of footpaths



Pedestrians constrained to walk on the road due to lack of footpaths



Annexure - 9

39.

Office of the Chief Town Planner (Planning)
Town & Country Planning Department (HQ)
2nd floor, Dempo Tower, Patto Plaza, Panaji - Goa.
Ph. No. 2437352, E-mail-ctp.goa@nic.in

Ref. No.: 36/1/TCP/322/2018/2628

Date: 23/12/2018

ORDER

The directions of the Government u/s 39 of the Town & Country Planning Act 1974 are hereby issued to North Goa Planning & Development Authority to take up the process afresh of revising the Outline Development Plan for Mapusa Planning Area by following the procedure envisaged u/s 29, 30 and 34 to 37 of the Town & Country Planning Act 1974.

Also it is directed to take up the preparation of Land Use Map and Land Use Register indicating present use of land under Mapusa Planning Area u/s 26 and 27 of Town & Country Planning Act 1974.

This is issued with approval of the Government vide note bearing no. 36/1/TCP/322/2018/2499, dtd. 12/12/2018.

M. Shew the chun
for the design.
MR [Signature] (AE)

(Rajesh Naik)
Chief Town Planner
(Planning)

To,
Member Secretary,
North Goa Planning & Development Authority,
Mala, Panaji, Goa.

Copy to:-
The OSD to Hon'ble Minister for TCP, Secretariat, Porvorim -Goa.

Office of the Chief Town Planner
Planning Department
1868
2018



URBAN AND REGIONAL DEVELOPMENT PLANS FORMULATION AND IMPLEMENTATION (URDPFI) GUIDELINES

Volume I

January, 2015



Government of India
Ministry of Urban Development
<http://moud.gov.in>



Town and Country Planning Organisation

8.2. Transportation Planning

Besides the National Urban Transport Policy (2006), the National Transport Development Policy Committee (NTDPC)¹³⁵ was constituted by the Government of India in 2010 to formulate a long-term transport policy having an aim to set up the conditions for a coherent transport strategy for India in the long term for the horizon year 2032, with a vision to arrive well-developed and competent institutional system for planning, management and execution of transport projects. Indian cities are expanding and therefore urban transport has gained regional importance. The public transport needs to improve by an integrated road and rail base transport, expansion of BRTS/MRTS, etc through formulation of Master/Development/Mobility Plan which may help to integrate transport and urban development. Similarly, bus priority ways, connectivity of MRTS with CBD and residential areas, improvement of intermediate public transport and priority in planning for NMT, etc should be developed along with other facilities such as parking, street furniture, etc.

The report recommends that State Governments should also enact “Comprehensive Urban Transport Law” to define the roles and responsibilities of the city authorities and State level entities related to public transport, landuse and transport integration, multi-modal integration, transport infrastructure for pedestrians, bicycle, cycle rickshaws, etc. Further, priority in planning for various modes should focus on improving mobility through NMT, Public Transport, Para-Transit and Personal vehicles in order. There is a need to set up Metropolitan Urban Transport Authorities as holistic and integrated decision making and coordinating bodies. The dedicated non-lapsable and non-fungible urban transport funds should be set-up at the National, State and City levels.

Each Municipality and Development Authority could have a Transportation and Traffic cell/division to comprehensively prepare CMP in lines with the Development Plan, implement the transportation plan and coordinate with Traffic Police. The role of such a cell/division is also to include application of smart technologies to improve transportation in the city. It is necessary for Transportation and Traffic cell/division to employ transport planners and urban planners for technical inputs.

8.2.1. Classification of Urban road

1. **Urban Expressway:** Expressways are divided highways for through traffic with full or partial control of access and generally with grade separations at major crossroads.¹³⁶
2. **Arterial road**¹³⁷: They are the primary roads for ensuring mobility function. They carry the largest volumes of traffic and longest trips in a city. These

¹³⁵ NTDPC India Transport Report- *Moving Indian to 2032*, Jan 2014.

¹³⁶ Highway Design Manual, Department of Transportation, New York State (USA).

roads are characterized by mobility and cater to through traffic with restricted access from carriageway to the side. In such cases, special provisions should be introduced to reduce conflict with the through traffic.

3. **Sub Arterial Road:** This category of road follows all the functions of an Arterial Urban road and is characterized by mobility, and caters to through traffic with restricted access from carriageway to the side. It carries same traffic volumes as the arterial roads. Due to its overlapping nature, Sub arterial roads can act as arterials. This is context specific and is based on the function and the land use development it passes through.
4. **Distributor/Collector Roads:** As the name suggests, these are connector roads, which distribute the traffic from access streets to arterial and sub arterial roads. They are characterized by mobility and access equally. It carries moderate traffic volumes compared to the arterial roads. Due to its overlapping nature, distributor roads can act as sub arterial and as access streets, depending upon the function and the land use of the surroundings.
5. **Local Street**¹³⁸: These are intended for neighbourhood (or local) use on which through traffic is to be discouraged. These roads should be made pedestrian and bicycle friendly by using modern traffic calming designs to keep the speeds within limits as per design.
6. **Access Street:** These are used for access functions to adjoining properties and areas. A majority of trips in urban areas usually originate or terminate on these streets.

8.2.2. Design Consideration of Urban Roads

8.2.2.1. Design Speed and Space Standard

The design speed and carriageway width for different types of road, as recommended recently by MoUD may be seen in **Table 8.2 & 8.3:**

Table 8.2: Design consideration of urban roads

S.No.	Road Types	Design Speed (kmph)	Space Standards (m)
1	Urban Expressway ¹³⁹	80	50-60
2	Arterial Road	50	50-80
3	Sub Arterial Road	50	30-50
4	Distributor/Collector Roads	30	12-30
5	Local Street ¹⁴⁰	10-20	12-20
6	Access Street	15	6-15

Source: Urban Road, Code of Practice Part-1, MoUD.

¹³⁷Urban Road Code of Practice, MoUD.

¹³⁸Urban Street Design Guidelines, UTTIPEC.

¹³⁹The Urban expressway design standards have not been developed in India, However for urban context, it is assumed as Main Arterial road and IRC: 86-1983 recommends design speed of such road is 80 KPH and Space standard of 50-60m width.

¹⁴⁰ Urban Street Design Guidelines, UTTIPEC.

8.2.2.2. Carriageway Width

Table 8.3: Carriageway Width for each type of road

S.No.	Types of Roads	Characteristics	Width of each car lane (m)	Width of each Bus lane (m)
1	Urban Expressway ¹⁴¹	Minimum 6 lanes divided (using a median)	3.0 to 3.5m width each	3.5m -(segregated)
2	Arterial Road	Minimum 6 lanes divided (using a median)	3.0 to 3.5m width each	3.5m -(segregated)
3	Sub Arterial Road	Minimum 4 lanes divided (using a median)	3.0 to 3.5m width each	3.5m (segregated) or Painted lane
4	Distributor/Collector Roads	Maximum 4 lanes of 3.0m width each (excluding marking) or 2 lanes of 3.0 to 3.3m width each (excluding marking) with or without an intermittent median	2 lanes of 3.0 to 3.5m width each	Mixed traffic
5	Local Street ¹⁴²	1 to 2 lanes, (undivided);traffic calming is required	2.75 to 3.0m width each	Not required
6	Access Street	1 to 2 lanes, (undivided); of 2.75 to 3.0m width each,	2.75 to 3.0m width each	Not required

Source: Code of Practice Part-1, MoUD, (refer Appendix I of Volume II B for the Cross Sections).

Notes:

1. Footpath, NMT provisions and Right of Use (RoU) of the various infrastructure shall also be assigned in the RoW at the stage of finalisation of road network and hierarchy.
2. RoW shall also include a well-planned utility corridor.
3. Road levels to be defined at the Local Area Plan level to ensure integrated road levels with drainage system and slope.
4. No roads to have two different road levels without a proper median or a separator.

8.2.3. Footpath

Footpath should be normally designed for a pedestrian Level of Service (LOS) B, thereby providing wide pedestrian facilities for pleasant and comfortable walking. Under resource constraint LOS C can be adopted for deciding the width of footpath mentioned in Table 8.4. The width of footpaths depends upon the expected pedestrian traffic and may be fixed with the help of the following norms subject to not being less than 1.8m

¹⁴¹ The Urban expressway design standards have not been developed in India, However for urban context, it is assumed as Main Arterial road, and hence the lane of width is assumed to be the same as arterial road which is referred from Code of Practice Part-1, MoUD.

¹⁴² Urban Street Design Guidelines, UTTIPEC.

Table 8.4: Capacity of Footpath& Design

Width of sidewalk (m)	Design Flow in Number of Persons per hour			
	In Both Directions		All in one direction	
	LOS B	LOS C	LOS B	LOS C
1.8	1350	1890	2025	2835
2	1800	2520	2700	3780
2.5	2250	3150	3375	4725
3	2700	3780	4050	5670
3.5	3150	4410	4725	6615
4	3600	5040	5400	7560

Source: IRC 103-2012.

The land use adjacent to road significantly influences generation of pedestrian traffic. Recommended width of footpath along various landuses are given in Table 8.5

Table 8.5: Required width of footpath as per adjacent land use

S.No.	Description	Width
1	Minimum free walkway width and residential/mixed use areas	1.8
2	Commercial/Mixed Use Areas	2.5
3	Shopping Frontages	3.5 to 4.5
4	Bus Stops	3
5	High Intensity Commercial Areas	4

Source: IRC 103-2012.

8.2.4. Cycle Tracks

Cycle infrastructure width requirements are based on vehicle dimensions, volume and clearance requirements of moving vehicles (cycle rickshaw, freight rickshaw). These requirements vary for straight riding cyclists and those manoeuvring a bend at a cruising speed.

Exclusive lanes for slow moving vehicles-bicycles and rickshaws and pedestrians along with spaces for street vendors are also essential. Hawkers and roadside vendors provide services to bus commuters and pedestrians therefore designed spaces would discourage them from occupying the carriageway. This improves the capacity of the lanes designed for motorized vehicles and increases safety of bicyclists and pedestrians.

Table 8.6: Cycle / NMT track

Sl No.	Arterial Roads	Sub Arterial Roads	Distributary Roads	Access Roads
Non-Motorised Vehicle	Segregated Cycle Track	Segregated Cycle Track	Cycle Lane	Mixed \traffic
Location	Between Carriageway or street parking and footpath on either edge of the carriageway	Between Carriageway or street parking and footpath on either edge of the carriageway	On the edge of the carriageway, adjacent to the footpath or parking.	Not Applicable
Gradient	1:12 – 1:20	1:12 – 1:20	1:12 – 1:20	1:12 – 1:20
Lane width	2.2 to 5.0m	2.2 to 5.0m	1.5 to 2.5m	Mixed with motorized vehicular traffic
Minimum Width	2.5 for a two lane cycle track and 1.9m for a common cycle track and footpath	2.0 for a two lane cycle track and 1.7m for a common cycle track and footpath	1.5m	1m (painted)

Source: Code of Practice Part-1, MoUD, 2012.

8.2.5. For Hilly Areas

Width of roads in hilly areas is given below which can be adopted as per requirement and adjoining land uses.

Table 8.7: Carriageway width in Hilly areas

S.No.	Description	Width(metre)
1.	Single lane without kerbs	05.00
2.	2-lane without kerbs	08.80
3.	2-lane with kerbs	10.00
4.	3-lane with /without kerbs	13.00 / 11.80

Source: TCPO, Government of Himachal Pradesh.

8.2.6. Passenger Car Units (PCU)

The PCU standards as per the vehicle type for planning the area requirement are given in **Table 8.8** below:

Table 8.8: PCU standards

S.No.	Vehicle Type	Equivalency factor
1	Passenger car, tempo, auto, jeep, vans, or agricultural tractor	1.0
2	Truck, bus, agricultural tractor-trailer	3.0
3	Motor-cycle, scooter and cycle	0.5
4	Cycle-rickshaw	1.5
5	Horse drawn vehicle	4.0
6	Bullock cart	5.0
7	Hand-cart	6.0

Source: JnNURM - Rapid Training Programme, Preparation of DPRs, UDPFI guidelines and in IRC 106-1990.

**Study on Traffic and
Transportation
Policies And Strategies
in Urban Areas in India**

Final Report

May 2008

Indices computed for the selected 30 cities

Sl. No.	City Name	Public Transport Accessibility Index	Service Accessibility Index (% of Work trips accessible in 15 minutes time)	Congestion Index	Walkability Index	City Bus Transport Supply index	Safety Index	Para Transit Index	Slow Moving Vehicle Index	On- street Parking Interference Index
1	Gangtok	0.00	94.12	0.21	0.30	0.00	0.04	0.00	0.00	0.59
2	Panaji	0.88	73.47	0.07	0.32	7.64	0.02	30.20	0.02	0.47
3	Shimla	0.70	76.84	0.13	0.22	8.66	0.06	0.00	0.00	0.54
4	Pondicherry	2.12	85.68	0.20	0.37	8.62	0.04	39.70	0.07	1.80
5	Bikaner	0.00	77.00	0.20	0.43	0.00	0.04	64.50	0.08	0.75
6	Raipur	0.00	93.27	0.30	0.41	0.00	0.02	104.00	0.10	0.67
7	Bhubaneswar	1.27	31.72	0.33	0.28	2.93	0.05	40.50	0.10	1.14
8	Chandigarh	1.64	83.13	0.00	0.91	17.54	0.08	75.10	0.08	0.66
9	Hubli Dharwad	0.97	43.68	0.23	0.39	15.15	0.04	86.85	0.09	0.63
10	Guwahati	1.22	56.00	0.33	0.39	5.55	0.03	52.50	0.09	1.37
11	Amritsar	0.00	68.85	0.20	0.31	0.00	0.06	91.30	0.09	1.24
12	Trivandrum	1.71	54.00	0.23	0.34	20.03	0.06	63.70	0.09	0.74
13	Madurai	2.13	69.50	0.10	0.40	42.77	0.11	53.70	0.08	0.69
14	Agra	0.00	57.30	0.07	0.38	0.00	0.14	35.70	0.10	2.42
15	Bhopal	0.95	45.00	0.20	0.47	12.82	0.08	79.70	0.08	1.09
16	Kochi	1.47	57.30	0.17	0.57	16.07	0.09	70.10	0.03	1.00
17	Patna	0.00	48.00	0.23	0.65	0.00	0.19	88.80	0.14	1.21
18	Varanasi	0.00	46.00	0.41	0.33	0.00	0.16	64.49	0.08	0.98
19	Nagpur	1.06	34.45	0.30	0.66	10.21	0.10	50.50	0.11	1.13
20	Jaipur	1.38	51.00	0.30	0.64	11.11	0.06	46.70	0.05	1.33
21	Kanpur	0.71	42.86	0.33	0.59	5.64	0.05	19.30	0.09	1.14
22	Surat	0.00	53.95	0.31	0.62	2.87	0.15	63.15	0.07	1.31
23	Pune	3.15	54.35	0.20	0.81	16.43	0.22	106.20	0.04	0.98
24	Ahmedabad	2.49	21.54	0.30	0.85	12.99	0.14	73.90	0.06	2.03
25	Hyderabad	1.62	6.08	0.37	0.68	31.88	0.06	76.60	0.03	1.24
26	Chennai	1.38	12.00	0.37	0.77	33.39	0.07	64.18	0.04	1.26
27	Bangalore	1.01	13.00	0.40	0.63	39.22	0.11	89.70	0.02	1.28
28	Delhi	1.09	16.36	0.47	0.87	43.86	0.32	75.60	0.04	2.82
29	Kolkata	1.12	14.00	0.40	0.81	26.20	0.08	28.50	0.03	3.00
30	Mumbai	1.34	17.00	0.47	0.85	16.66	0.25	88.30	0.03	2.80